

The invention claimed is:

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A43*
1. An optical package comprising:  
an input ferrule comprising at least one capillary extending axially through said ferrule;  
at least two pair of optical fibers extending through said at least one capillary, said fibers comprising a first input fiber, a first reflected fiber, a second input fiber and a second reflected fiber said fibers screened for a pre-determined tolerance for a characteristic selected from the group consisting of core concentricity, ovality, and diameter; and  
an optical filter optically aligned with said optical fibers such that a first wavelength of optical signals transmitted through said first input fiber are reflected by said filter to said first reflected fiber and a second wavelength of optical signals transmitted through said second input fiber are reflected by said filter to said second reflected fiber.
  2. The optical package of claim 1, further comprising an aspheric lens optically coupling said first input fiber to said filter.
  3. The optical package of claim 1, wherein said filter is selected from a group consisting of a gain flattening filter, a notch filter, a band pass filter, and a shaping filter.
  4. The optical package of claim 1, wherein said first reflected fiber is coupled to said second input fiber.
  5. The optical package of claim 4, further comprising an optical device coupled between said first reflected fiber and said second input fiber.
  6. The optical package of claim 5, wherein said optical device comprises an optical amplifier.
  7. The optical package of claim 1, further comprising:

an output ferrule comprising a capillary extending axially through said ferrule; and a transmitted fiber extending through said output ferrule capillary, said transmitted fiber optically coupled to said first input fiber.

8. The optical package of claim 7, further comprising an aspheric lens optically coupling said transmitted fiber to said filter.

9. The optical package of claim 7, further comprising an energy dissipating device coupled to said transmitted fiber and dissipating a signal communicated from said first input fiber.

10. A multiple-port optical package comprising:

an input ferrule comprising at least one capillary extending axially through said ferrule;

at least two pair of optical fibers extending through said at least one capillary, said fibers comprising a first input fiber, a first reflected fiber, a second input fiber and a second reflected fiber said fibers screened for a pre-determined tolerance for a characteristic selected from the group consisting of core concentricity, ovality, and diameter;

an optical filter in communication with said optical fibers such that a first wavelength of optical signals transmitted through said first input fiber are reflected by said filter to said first reflected fiber and a second wavelength of optical signals transmitted through said second input fiber are reflected by said filter to said second reflected fiber;

an output ferrule comprising at least one output capillary extending axially through said ferrule;

at least two output optical fibers extending through said at least one output capillary and receiving light signals transmitted through said filter;

11. The multiple-port optical package of claim 10, wherein said output optical fibers comprise a first output fiber and a second output fiber, and wherein said first output fiber is

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in optical communication with said first input fiber and said second output fiber is in communication with said second input fiber.

12. The multiple-port optical package of claim 10, wherein said output optical fibers comprise a first output fiber and a second output fiber, and wherein said first output fiber is in optical communication with said first reflected fiber and said second output fiber is in communication with said second reflected fiber.
  13. The multiple-port optical package of claim 10, wherein said output optical fibers comprise a first output fiber and a second output fiber, and wherein said first output fiber is in optical communication with said first input fiber and said second output fiber is in communication with said second reflected fiber.
  14. The multiple-port optical package of claim 10, wherein at least one of said reflected fibers is coupled to a power-dissipating device.
  15. The multiple-port optical package of claim 10, wherein at least two of said reflected fibers is coupled to a power-dissipating device.
  16. The multiple-port optical package of claim 10, wherein at least one of said output optical fibers is coupled to a power-dissipating device.
  17. The multiple-port optical package of claim 10, wherein at least two of said output optical fibers is coupled to a power-dissipating device.
  18. An add/drop optical module comprising:  
first and second six-port optical packages, each of said packages comprising a first input fiber, a first reflected fiber, a second input fiber, a second reflected fiber, a drop fiber, and an add fiber, said drop fiber optically coupled to said first input fiber and said add fiber optically coupled to said second reflected fiber;

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wherein said first reflected fiber of said first package is coupled to said first input fiber of said second package; and

wherein said second input fiber of said first package is coupled to said second reflected fiber of said first package.

19. A multiple-port add/drop package comprising:
- an optical filter;
  - a first input fiber;
  - a first reflected fiber optically coupled with said first input fiber via a light signal reflected by said optical filter;
  - a second input fiber;
  - a second reflected fiber optically coupled with said second input fiber via a light signal reflected by said optical filter; and
  - a third input fiber optically coupled to said first reflected fiber via a light signal transmitted through said filter.

20. The multiple-port add/drop package of claim 19, further comprising a second input fiber optically coupled to the second reflected fiber.

21. The multiple-port add/drop package of claim 19, further comprising a first transmitted fiber optically coupled to said first input fiber.

22. The multiple-port add/drop package of claim 21, further comprising a second transmitted fiber optically coupled to said second input fiber.

23. A multiple-port drop/add package comprising:
- an optical element;
  - a first input fiber;
  - a first reflected fiber optically coupled with said first input fiber via reflection of said optical element;

a second input fiber;

a second reflected fiber optically coupled with said second input fiber via reflections of said optical element; and

a first transmitted fiber optically coupled to said first input fiber.

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24. The multiple-port drop/add package of claim 23, further comprising a second transmitted fiber optically coupled to the second input fiber.

25. The multiple-port drop/add package of claim 24, further comprising a third input fiber optically coupled to said first reflected fiber via transmission through said optical element.

26. A multiple-port optical device comprising:

a first input fiber transmitting a first signal;

a second input fiber transmitting a second signal;

a third input fiber transmitting a third signal;

an optical element in communication with said first, second and third fibers;

a first transmitted fiber optically coupled with said first input fiber through said optical element;

a second transmitted fiber optically coupled with said second input fiber through said optical element; and

a third transmitted fiber optically coupled with said third input fiber.

27. The multi-port optical device of claim 26, wherein said optical element is selected from the group consisting of an isolator, a circulator, a splitter, an attenuator, and a shaping filter.

28. The multi-port optical device of claim 26, further comprising:

a fourth input fiber transmitting a fourth signal; and

a fourth output fiber optically coupled with said fourth input fiber.